

AMENDMENTS TO THE CLAIMS

1. (Original) A method for extracting algorithmic information from a message stream, each message having associated arguments and each argument having an associated value, the method comprising the steps of:
 - (a) identifying a message as algorithmic information;
 - (b) identifying the value of an argument as parameter information the first time the value is encountered; and
 - (c) identifying the value of the argument as algorithmic information each subsequent time the value is encountered.
2. (Original) The method of claim 1 wherein step (b) further comprises the steps of:
 - (b-a) identifying the value of an argument as parameter information the first time the value is encountered; and
 - (b-b) storing the identified value in an associated memory element.
3. (Currently Amended) The method of claim 2 wherein step (b-b) comprises storing the identified argument_value in a stack memory element.
4. (Currently Amended) The method of claim 1 further comprising the steps of storing a message identifier in an algorithmic sub-stream when a message is encountered and storing an argument-a value identifier in the algorithmic sub-stream when a value of an argument is encountered subsequent to the first time.
5. (Original) The method of claim 2 further comprising the steps of storing a message identifier in an algorithmic sub-stream when a message is encountered and storing a value identifier in the algorithmic sub-stream when a value of an argument is encountered subsequent to the first time, the value identifier comprising the location of the value in the associated memory element.
6. (Original) A method for extracting algorithmic information from a message stream, each message having associated arguments and each argument having an associated value, and transmitting the extracted information from a server to a remote client, the method comprising the steps of:
 - (a) identifying, at the server, a message as algorithmic information;
 - (b) storing a message identifier in an algorithmic sub-stream;

(c) identifying, at the server, a value of an argument associated with the message as parameter information the first time the value is encountered; and

(d) identifying, at the server, the value as algorithmic information each subsequent time the value is encountered.

7. (Currently Amended) The method of claim 6 wherein step (c) comprises:

(c-a) identifying, at the server, a value of an argument associated with the message as parameter information the first time the value is encountered; and

(c-b) storing a parameter identifierthe parameter information in a parametric sub-stream.

8. (Original) The method of claim 7 further comprising the step of compressing the parametric sub-stream.

9. (Currently Amended) The method of claim 6 wherein step (d) further comprises:

(d-a) identifying, at the server, the value as algorithmic information each subsequent time the value is encountered; and

(d-b) storing an algorithmic identifierthe algorithmic information in the algorithmic sub-stream.

10. (Original) The method of claim 9 further comprising the step of compressing the algorithmic sub-stream.

11. (Original) The method of claim 6 further comprising the step of transmitting the algorithmic sub-stream.

12. (Original) The method of claim 7 further comprising the step of transmitting the parametric sub-stream.

13. (Currently Amended) An apparatus for extracting algorithmic information from a message stream, each message having associated arguments and each argument having an associated value, and transmitting the extracted information via a network connection, the apparatus comprising:

 a transmitter in electrical communication with a network connection;

 a memory element in electrical communication with said transmitter, said memory element providing storage for an algorithmic sub-stream and a parametric sub-stream;

an extractor in electrical communication with said memory element, said extractor separating a message having associated arguments into algorithmic information and value-parameter information and storing the algorithmic information in an algorithmic sub-stream;

wherein said transmitter transmits the algorithmic sub-stream.

14. (Currently Amended) The apparatus of claim 13 wherein said extractor stores the value-parameter information in a parametric sub-stream.

15. (Original) The apparatus of claim 13 wherein said transmitter transmits the parametric sub-stream.

16. (Original) The apparatus of claim 13 wherein said memory element comprises a stack data structure.

17. (Original) The apparatus of claim 13 further comprising a compressor in electrical communication with said memory element and said transmitter, said compressor compressing the algorithmic sub-stream.

18. (Currently Amended) A system for extracting algorithmic information from a message stream, each message having associated arguments and each argument having an associated value, and transmitting the extracted information from a server to a client via a connection, the system comprising:

a client including:

a receiver in electrical communication with the connection, the receiver receiving algorithmic information transmitted over the connection; and

a server including:

a transmitter in electrical communication with the connection, the transmitter transmitting an algorithmic sub-stream comprising algorithmic information separated by the extractor over the connection; an extractor separating a message having associated arguments into algorithmic information and value-parameter information; and a memory element in electrical communication with said extractor, said memory element storing an algorithmic sub-stream including algorithmic information separated by said extractor.

19. (Currently Amended) The system of claim 18 wherein thesaid transmitter transmits a parametric sub-stream comprising the parameter information separated by the extractor, and the client further includes a client memory element in electrical

communication with said receiver, said client memory element storing algorithmic and parametric sub-streams transmitted by said server.

20. (Original) The system of claim 19 wherein said client further includes an extractor in electrical communication with said client memory element, said client extractor producing the message from the algorithmic and parametric sub-streams.